be readily adapted to meet various communications standards and which can provide wireless communications.

The present invention may be embodied in other specific forms without departing from its spirit or essential characteristics. The described embodiments are to be considered in all respects only as illustrative and not restrictive. The scope of the invention is, therefore, indicated by the appended claims rather than by the foregoing description. All changes which come within the meaning and range of equivalency of the claims are to be embraced within their scope.

What is claimed and desired to be secured by United States Letters Patent is:

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1. An apparatus for receiving a plug having a biased clip and for making electrical connection with at least first and second electrical contacts provided on the plug, the apparatus comprising:

a communications device, the communications device having a first side with a dimension which is not substantially greater than 8mm;

body means, the body means including at least one recess means provided in the body means, the recess means having dimensions such that the plug is closely received therein;

unit means for holding the body;

means for removably holding the unit means substantially within the communications device such that the unit means and the body means can be removed from and inserted into the communications device as a unitary module;

a first electrical conductor provided in the recess means, the first electrical conductor being positioned such that it makes electrical continuity with the first

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electrical contact in the plug when the plug is received by the recess means;

a second electrical conductor provided in the recess means, the second electrical conductor being positioned such that it makes electrical continuity with the second electrical contact in the plug when the plug is received by the recess means; and

means for conveying any electrical signal present on the first and second electrical contacts to the communications device.

2. An apparatus as defined in claim 1 wherein the unit means comprises a direct access arrangement.

3. An apparatus as defined in claim 2 wherein the direct access arrangement comprises a billing tone filter.

4. An apparatus as defined in claim 1 wherein the recess means comprises at least one RJ-*xx* series receptacle.

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5. An apparatus as defined in claim 1 further comprising means for extending and retracting the body means into and out of the unit means.

6. An apparatus as defined in claim 5 wherein the means for extending and retracting the body means further comprises means for holding the body means in an extended position.

7. An apparatus as defined in claim 5 further comprising means for removing the body means from the unit means.

8. An apparatus as defined in claim 1 further comprising an expandable member located at the second end of the recess means, the expandable member isolating the first and second electrical contacts from electrical continuity with an object in the surrounding environment such that passage of current from one or more of the first and second electrical contacts to an object present in the surrounding environment is prevented.

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9. An apparatus as defined in claim 1 wherein the means for isolating comprises an expandable and stretchable membrane anchored at the second end of the recess means.

10. An apparatus as defined in claim 1 wherein the body comprises a thickness and wherein the expandable means has a first position within the thickness of the body and a second expanded position which is outside the thickness of the body, the expandable means being biased to return to the first position.

11. An apparatus as defined in claim 1 wherein the body means comprises a first side and a second side and wherein the recess comprises a rectangular recess having three walls, the walls being oriented substantially perpendicularly to the first side.

12. An apparatus as defined in claim 11 wherein the four walls comprise a first pair of parallel opposing walls each having a length in the range from about .265 inches to about

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.285 inches and the third wall has a length in the range from about .45 inches to about .475 inches.

13. An apparatus as defined in claim 11 wherein the four walls comprise a first pair of parallel opposing walls each having a length in the range from about .265 inches to about .285 inches and the third wall has a length in the range from about .375 inches to about .4 inches.

14. An apparatus as defined in claim 1 further comprising means for releasably engaging the biased clip on the plug.

15. An apparatus as defined in claim 1 wherein the unit means comprises a shell having a plurality of grooves and wherein the body means further comprises guides sliding within the grooves.

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16. A communications device, the communications device having a first side with a dimension which is not substantially greater than 8mm, the communications device comprising:

data access means for interfacing communications signals received and generated by the communications device;

means for removably holding the data access means substantially within the communications device such that the data access means can be removed from and inserted into the communications device as a unitary module; and

means for conveying a communications signal between the data access means and a signal utilizing device.

17. A communications device as defined in claim 16 wherein the means for conveying a communications signal comprises:

body means, the body means including at least one recess means provided in the body means, the recess means having dimensions such that a plug is closely received therein;

a first electrical conductor provided in the recess means, the first electrical conductor being positioned such that it makes electrical continuity with the first electrical contact in the plug when the plug is received by the recess means;

a second electrical conductor provided in the recess means, the second electrical conductor being positioned such that it makes electrical continuity with the second electrical contact in the plug when the plug is received by the recess means; and

means for conveying any electrical signal present on the first and second electrical contacts to the communications device.

18. A communications device as defined in claim 16 wherein the means for conveying a communications signal comprises an antenna.

19. A communications device as defined in claim 16 wherein the means for conveying a communications signal comprises:

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a cord; and

means for connecting the cord to a portable telephone.

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20. A communications card for use in a data utilization device and for receiving an RJ-*xx* series plug having a biased clip and for making electrical connection with at least first and second electrical contacts provided on the plug, comprising:

a first surface;

a second surface, the second surface being substantially parallel to the first surface and forming upper and lower surfaces of the communications card;

a first end;

recess means provided at the first end, the recess means being oriented substantially perpendicularly to the upper surface and the lower surface, the recess means having dimensions such that the plug is closely received therein;

a first electrical conductor provided in the recess means, the first electrical conductor being positioned such that it makes electrical continuity with a first electrical contact in the plug when the plug is received by the recess means;

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a second electrical conductor provided in the recess means, the second electrical conductor being positioned such that it makes electrical continuity with a second electrical contact in the plug when the plug is received by the recess means;

means for conveying any electrical signal present on the first and second electrical contacts to the communications device; and

a cutout formed on the first surface adjacent to the recess means, the cutout shaped to receive the biased clip.

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21. An apparatus for providing a removable electrical connection between a communications line having an RJ-*xx* series plug at one end and a communications device installed in a computing device, the communications device having a thickness which is not substantially greater than 8mm and a first electrical coupling, the apparatus comprising:

body means for providing a surface which can be gripped by a user;

first recess means provided in the body means, the first recess means having dimensions such that the RJ-*xx* series plug is closely received therein;

second recess means provided in the body means, the second recess means having dimensions such that the RJ-*xx* series plug is closely received therein, the first and the second recess means being in a side-by-side relationship in the body means;

a first electrical conductor provided in the first recess means, the first electrical conductor being positioned such that it makes electrical continuity with a first electrical contact in the RJ-*xx* series plug when

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the RJ-*xx* series plug is received in the first recess means;

a second electrical conductor provided in the first recess means, the second electrical conductor being positioned such that it makes electrical continuity with a second electrical contact in the RJ-*xx* series plug when the RJ-*xx* series plug is received in the first recess means;

a third electrical conductor provided in the second recess means, the third electrical conductor being positioned such that it makes electrical continuity with a first electrical contact in the RJ-*xx* series plug when the RJ-*xx* series plug is received in the second recess means;

a fourth electrical conductor provided in the second recess means, the fourth electrical conductor being positioned such that it makes electrical continuity with a second electrical contact in the RJ-*xx* series plug when the RJ-*xx* series plug is received in the second recess means;

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coupling means for making releasable electrical connection to the first electrical coupling, the coupling means provided on one side of the body means;

first means for communicating any electrical signal present on the first electrical conductor to the coupling means;

second means for communicating any electrical signal present on the second electrical conductor to the coupling means;

third means for communicating any electrical signal present on the third electrical conductor to the coupling means; and

fourth means for communicating any electrical signal present on the fourth electrical conductor to the coupling means.

22. An apparatus as defined in claim 21 wherein the body means comprises a plastic material.

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23. An apparatus as defined in claim 21 wherein the first recess means has dimensions such that an RJ-11 plug is closely received therein.

24. An apparatus as defined in claim 23 wherein the second recess means has dimensions such that the RJ-45 plug is closely received therein.

25. An apparatus as defined in claim 21 further comprising:

a fifth electrical conductor provided in the first recess means, the fifth electrical conductor being positioned such that it makes electrical continuity with a third electrical contact in the RJ-*xx* series plug when the RJ-*xx* series plug is received in the first recess means;

a sixth electrical conductor provided in the first recess means, the sixth electrical conductor being positioned such that it makes electrical continuity with a fourth electrical contact in the RJ-*xx* series plug when

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the RJ-*xx* series plug is received in the first recess means;

a seventh electrical conductor provided in the second recess means, the seventh electrical conductor being positioned such that it makes electrical continuity with a third electrical contact in the RJ-*xx* series plug when the RJ-*xx* series plug is received in the second recess means;

an eighth electrical conductor provided in the second recess means, the eighth electrical conductor being positioned such that it makes electrical continuity with a fourth electrical contact in the RJ-*xx* series plug when the RJ-*xx* series plug is received in the second recess means;

fifth means for communicating any electrical signal present on the fifth electrical conductor to the coupling means;

sixth means for communicating any electrical signal present on the sixth electrical conductor to the coupling means;

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seventh means for communicating any electrical signal present on the seventh electrical conductor to the coupling means; and

eighth means for communicating any electrical signal present on the eighth electrical conductor to the coupling means.

26. A portable card for use in a data utilization device including a PCMCIA Type III card slot, the card comprising:

means for receiving an RJ-*xx* series plug having a biased clip and for making electrical connection with at least first and second electrical contacts provided on the plug;

means for receiving a first memory card when the portable card is disposed within the PCMCIA Type III card slot;

means for receiving a second memory card, simultaneously with the first memory card, when the portable card is disposed within the PCMCIA Type III card slot, the first and the second memory cards complying with a standard selected from the group consisting of the compact flash memory standard and the miniature card standard.

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27. A communications card for use in a data utilization device and for receiving an RJ-*xx* series plug having a biased clip and for making electrical connection with at least first and second electrical contacts provided on the plug, comprising:

a pivoting cover provided on a first end of the communications card, the pivoting cover having an open position and a closed position;

recess means for receiving the plug within the pivoting cover when the pivoting cover is in the open position, the recess means having dimensions such that the plug is closely received therein;

a first electrical conductor provided in the recess means, the first electrical conductor being positioned such that it makes electrical continuity with a first electrical contact in the plug when the plug is received by the recess means;

a second electrical conductor provided in the recess means, the second electrical conductor being positioned such that it makes electrical continuity with a second

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electrical contact in the plug when the plug is received by the recess means; and

means for conveying any electrical signal present on the first and second electrical contacts to the computing device.

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28. A communications card for use in a data utilization device and for receiving an RJ-*xx* series plug having a biased clip and for making electrical connection with at least first and second electrical contacts provided on the plug, comprising:

a sliding drawer provided on a first end of the communications card, the sliding drawer having an open position and a closed position;

recess means for receiving the plug within the sliding drawer when the sliding drawer is in the open position, the recess means having dimensions such that the plug is closely received therein;

first electrical conductor provided in the recess means, the first electrical conductor being positioned such that it makes electrical continuity with a first electrical contact in the plug when the plug is received by the recess means;

second electrical conductor provided in the recess means, the second electrical conductor being positioned such that it makes electrical continuity with a second

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electrical contact in the plug when the plug is received by the recess means; and

means for conveying any electrical signal present on the first and second electrical contacts to the computing device.

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29. A communications card for use in a data utilization device and for receiving an RJ-xx series plug having a biased clip and for making electrical connection with at least first and second electrical contacts provided on the plug, comprising:

a sliding drawer provided on a first end of the communications card, the sliding drawer having an open position and a closed position;

recess means for receiving the plug within the sliding drawer when the sliding drawer is in the open position, the recess means having dimensions such that the plug is closely received therein;

a bottom formed on the sliding drawer;

means for moving the bottom out of the sliding drawer when the drawer is in the open position;

a first electrical conductor provided in the recess means, the first electrical conductor being positioned such that it makes electrical continuity with a first electrical contact in the plug when the plug is received by the recess means;

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a second electrical conductor provided in the recess means, the second electrical conductor being positioned such that it makes electrical continuity with a second electrical contact in the plug when the plug is received by the recess means; and

means for conveying any electrical signal present on the first and second electrical contacts to the computing device

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30. A communications card for use in a data utilization device and for receiving an RJ-xx series plug having a biased clip and for making electrical connection with at least first and second electrical contacts provided on the plug, comprising:

a first jaw provided on a first end of the communications card;

a second jaw provided on a first end of the communications card, the first jaw and the second jaw having a first position extending out of the communications card and a second position retracted into the communications card;

recess means for receiving the plug, the recess means formed by a space between the first jaw and the second jaw, and bounded by the first jaw and the second jaw, when the first and second jaws are in their first extended positions, the recess means having dimensions such that the plug is closely received therein;

a first electrical conductor provided in the recess means, the first electrical conductor being positioned such that it makes electrical continuity with a first

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electrical contact in the plug when the plug is received by the recess means;

a second electrical conductor provided in the recess means, the second electrical conductor being positioned such that it makes electrical continuity with a second electrical contact in the plug when the plug is received by the recess means; and

means for conveying any electrical signal present on the first and second electrical contacts to the computing device.

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31. A communications card for use in a data utilization device and for receiving an RJ-xx series plug having a biased clip and for making electrical connection with at least first and second electrical contacts provided on the plug, comprising:

recess means for receiving the plug, the recess means having dimensions such that the plug is closely received therein;

means for rotating the recess means in an angular orientation, the angular orientation being selected from the group consisting of 90°, 180°, and 270°while maintaining operative connection with the plug;

a first electrical conductor provided in the recess means, the first electrical conductor being positioned such that it makes electrical continuity with a first electrical contact in the plug when the plug is received by the recess means;

a second electrical conductor provided in the recess means, the second electrical conductor being positioned such that it makes electrical continuity with a second

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electrical contact in the plug when the plug is received by the recess means; and

means for conveying any electrical signal present on the first and second electrical contacts to the computing device.

32. A communications card for use in a data utilization device including a PCMCIA Type III card slot, the communications card for receiving an RJ-*xx* series plug having a biased clip and for making electrical connection with at least first and second electrical contacts provided on the plug, the communications card comprising:

a card body;

a plurality of conductors formed at a first end of the card body;

a shell formed on the first end of the card body, the shell extending and retracting from the first end of the card body;

a recess formed in the shell to receive the plug;

a capture member adapted for holding the biased clip;

means for moving the capture member such that the recess enlarges to closely receive the plug and engaging the biased clip such that the contacts on the plug operatively contact a respective conductor in the card body;

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a second end of the card body making connection to the PCMCIA Type III card slot;

a communications device housed in the card body;

the conductors further comprising:

a first electrical conductor provided in the recess means, the first electrical conductor being positioned such that it makes electrical continuity with the first electrical contact in the plug when the plug is received by the recess means;

a second electrical conductor provided in the recess means, the second electrical conductor being positioned such that it makes electrical continuity with the second electrical contact in the plug when the plug is received by the recess means; and

means for conveying any electrical signal present on the first and second electrical contacts to the communications device.

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33. A PC card for use in a data utilization device including a PCMCIA Type III card slot comprising:

an upper surface;

a lower surface;

means for receiving a magnetic disk between the upper surface and the lower surface; and

means for conveying data present on the magnetic disk to the data utilization device when the PC card is inserted into the card slot.

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